

ABSTRACT OF THE DISCLOSURE

A process for manufacturing a bipolar type semiconductor device in which at least a part of a region where an electron and a hole are recombined during current flowing is formed with a silicon carbide epitaxial layer that has been grown from the surface of a silicon carbide substrate, is characterized by that the surface of the silicon carbide substrate is treated by hydrogen etching and the epitaxial layer is then formed by the epitaxial growth of silicon carbide from the treated surface. A propagation of a basal plane dislocation to the epitaxial layer can be further reduced by treating the surface of the silicon carbide substrate by using chemical mechanical polishing and hydrogen etching in this order.